

<b>Form 1449 (Modified)</b>  <b>Information Disclosure Statement By Applicant</b>  (Use Several Sheets if Necessary)	<b>Atty. Docket No.</b> AOL0111 <b>Applicant:</b> Stephen Loomis, et al. <b>Filing Date:</b> October 16, 2003	<b>Serial No.:</b> 10/688,423  <b>Group:</b> 2615
--	--	---

## U.S. Patent Documents

Examiner Initial	No.	Patent No.	Issue Date	Patentee	Class	Sub-class	Filing Date
	1	5,325,238	6/28/1994	Stebbins et al.			
	2	5,517,672	5/14/1996	Reussner et al			
	3	5,528,513	6/18/1996	Vaitzbilt et al			
	4	5,585,866	12/1996	Miller et al.			
	5	5,644,715	7/1/1997	Baughner			
	6	5,671,195	09/1997	Lee, Howard Hong-Dough			
	7	5,734,119	3/3/1998	France et al			
	8	5,761,417	7/28/1998	Henley et al.			
	9	5,784,597	07/1998	Chiu et al.			
	10	5,787,482	7/28/1998	Chen et al			
	11	5,802,502	9/1/1998	Gell et al			
	12	5,892,900	6/6/1996	Ginter et al			
	13	5,907,827	05/1999	Fang et al.			
	14	5,910,987	6/8/1999	Ginter et al			
	15	5,913,039	6/15/1999	Nakamura			
	16	5,915,019	6/22/1999	Ginter et al			
	17	5,917,912	6/29/1999	Ginter et al			
	18	5,920,861	7/6/1999	Hall et al			
	19	5,930,765	07/1999	Martin, John R			
	20	5,943,422	8/24/1999	Van Wie et al			
	21	5,944,778	8/31/1999	Takeuchi et al			
	22	5,949,876	9/7/1999	Ginter et al			
	23	5,956,321	9/21/1999	Yao et al			
	24	5,956,491	9/21/1999	Marks			
	25	5,959,945	09/1999	Kleiman, Ruben			
	26	5,982,891	11/9/1999	Ginter et al			
	27	5,996,015	11/30/1999	Day et al			
	28	6,041,354	3/21/2000	Billris et al			
	29	6,088,722	7/11/2000	Herz			
	30	6,112,023	8/29/2000	Dave et al			
	31	6,112,181	8/29/2000	Shear et al			
	32	6,138,119	10/24/2000	Hall et al			
	33	6,157,721	12/5/2000	Shear et al			
	34	6,160,812	12/2000	Bauman et al			
	35	6,163,683	12/19/2000	Dunn et al			
	36	6,173,325	1/9/2001	Kukreja			
	37	6,185,683	2/6/2001	Ginter et al			
	38	6,195,701	2/27/2001	Kaiserworth et al			
	39	6,199,076	3/6/2001	Logan et al			
	40	6,222,530	4/24/2001	Sequiera			
	41	6,237,786	5/29/2001	Ginter et al			
	42	6,240,185	5/29/2001	Van Wie et al			

/Andrew Flanders/ 01/27/2010

1

43	6,247,061	6/12/2001	Douceir				
44	6,253,193	6/26/2001	Ginter et al				
45	6,262,569	7/17/2001	Carr et al				
46	6,300,880	10/9/2001	Sitnik				
47	6,314,576	11/2001	Asamizuya et al.				
48	6,332,163	12/18/2001	Bowman-Amuah				
49	6,363,488	3/26/2002	Ginter et al				
50	6,389,402	5/14/2002	Ginter et al				
51	6,427,140	7/30/2002	Ginter et al				
52	6,438,450	8/20/2002	DiLorenzo				
53	6,438,630	8/20/2002	DeMoney				
54	6,446,125	9/3/2002	Huang et al				
55	6,446,126	9/3/2002	Huang et al				
56	6,449,367	9/10/2002	Van Wie et al				
57	6,453,316	9/17/2002	Kairbe et al				
58	6,477,541	11/2002	Korst et al				
59	6,477,707	11/2002	King et al.				
60	6,492,469	12/2002	Willis et al				
61	6,601,041	7/29/2003	Brown et al				
62	6,618,484	9/9/2003	Van Wie et al				
63	6,658,568	12/2/2003	Ginter et al				
64	6,668,325	12/23/2003	Collberg et al				
65	6,772,435	08/2004	Thexton et al				
66	6,910,220	06/2005	Hickey et al				
67	6,950,623	09/2005	Brown et al				
68	7,020,710	03/2006	Weber et al				
69	7,020,893	03/2006	Connelly, Jay H				
70			Giocalone Jr., Louis D.				
71	7,136,906	11/2006					
72	7,185,352	02/2007	Halford et al.				
73	6,772,340	08/2004	Peinado et al.				
74	6,263,313	07/2001	Milsted et al.				
75	7,024,485	04/2006	Dunning et al.				
	6,609,097	08/2003	Costello et al.				

## Published U.S. Patent Application

Examiner Initial	No.	Document No.	Publication Date	Assignee	Class	Sub-class	Translation Yes	Translation No
	1	2001/0003828	6/14/2001	Peterson et al				
	2	2002/0032907	03/2002	Daneils John J.				
	3	2002/0059624	05/2002	Machida et al				
	4	2002/0068525	06/2002	Brown et al.				
	5	2002/0078056	6/20/2002	Hunt et al.				
	6	2002/0082914	6/27/2002	Beyda et al				
	7	2002/0095510	07/2002	Sie et al				
	8	2002/0104099	8/2002	Novak, Robert Eustace				
	9	2002/0107968	2/6/2003	Messarina				
	10	2002/0108395	8/15/2002	Fujita et al.				
	11	2002/0152876	10/24/2002	Hughes et al				
	12	2002/0152878	10/24/2002	Akashi				
	13	2002/0198846	12/26/2002	Lao				

/Andrew Flanders/ 01/27/2010

	14	2003/0014436	1/16/2003	Spencer, et al.				
	15	2003/0018797	1/23/2003	Dunning et al				
	16	2003/0023973	Jan-03	Monson et al.				
	17	2003/0023975	Jan-03	Schrader et al.				
	18	2003/0069768	4/10/2003	Hoffman, et al.				
	19	2003/0121050	6/26/2003	Kalva et al.				
	20	2003/0126275	7/3/2003	Mungavan et al				
	21	2003/0135605	7/17/2003	Pendakur				
	22	2003/0195974	10/16/2003	Ronning et al				
	23	2004/0064507	4/1/2004	Sakata				
	24	2005/0159104	07/2005	Valley et al.				
	25	2002/0091761	07/2002	Lambert, James P.				
	26	2003/0236906	12/2003	Klemets et al.				
	27	2003/0048418	03/2003	Hose et al.				
	28	2003/0028893	02/2003	H. Addington, Timothy				
	29	2005/0114757	05/2005	Sahota et al.				

## Published Foreign Patent Application

Examiner Initial	No.	Document No.	Publication Date	Assignee	Class	Sub-class	Translation Yes	Translation No
	1	EP 1286351A2	2/26/2003	Surcouf et al.				
	2	EP 1178487A1	2/6/2002	Shimada et al				
	3	EP 1187423A2	3/13/2002	Watanabe, K.				
	4	EP 1229476A2	8/7/2002	Chatani et al				
	5	EP 1244021A1	9/25/2002	Yamamoto, K.				
	6	EP 1267247A2	12/18/2002	Du, et al.				
	7	WO 02/063414	8/14/2002	Dietsch, K-L.				
	8	WO 01/10496A2	2/15/2001	Rubin et al				
	9	TW 497055	8/1/2002	Tsais				
	10	JP 2002318587	10/31/2002	Akashit				
	11	JP 2002108395	4/10/2002	Kobe Steel Ltd				
	12	JP 2003069768	3/7/2003	Ricoh KK				

## Other Documents

Examiner Initial	No.	Author, Title, Date, Place (e.g. Journal) of Publication	
	1	Xu, C., Feng, D., "Web based Protection and Secure Distribution for Digital Music," August 13-16, 2001, Proceedings for International Conference on Internet and Multimedia Systems and Applications, Hawaii, USA, pp. 102-107.	
	2	Apple's iTunes Music Store - <a href="http://www.apple.com/music/store">http://www.apple.com/music/store</a>	Undated
	3	Conference Paper: IP Data Over Satellite to Cable Headends and a New Operation Model with Digital Store and Forward Multi-Media System	Undated
	4	Poellabauer, C. Schwan K., West, R., Coordinated CPU and Event Scheduling for Distributed Multimedia Applications, 10/12/2001, ACM Multimedia; Ottawa, Canada	
	5	"Packet Synchronization Recovery Circuit," Vol. 16, No 294, P.120	Undated
	6	Hodson, O., et al., "Skew Detection and Compensation for Internet Audio Application," 2000, IEEE International Conference on Multimedia Proceedings, USA, Part Vol.3, pp.1687-90.	
	7	Aurecochea, C., et al., "A Survey of QoS Architectures," Columbia University, New York.	Undated
	8	CEN, S., PU, R., STAEHI, R., WALPOLE, J., "A Distributed Real-Time MPEG Video Audio Player", Dept of Computer Science and Engineering, Oregon Graduate Institute of Science and Technology	Undated

/Andrew Flanders/ 01/27/2010

3

/ACF/

01/27/2010

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /ACF/

9	MANOUSELIS, N., KARAMPIPERIS, P., VARDIAMBASIS, I.O., MARAS, A., "Digital Audio Broadcasting Systems under a QoS Perspective", Telecommunications Laboratory, Dept. of Electronics & Computer Engineering, Technical University of Crete, Greece	Undated
10	Helix Universal Gateway Configuration Guide, RealNetworks Technical Blueprint Series	Undated
11	SION, R., ELMAGARMID, A., PRABHAKAR, S., REZGUI, A., "Challenges in designing a QoS aware Media Repository (working draft)", Computer Science, Purdue University, IN	Undated
12	CHEN, Z., TAN, S.-M., CAMPBELL, R., LI, Y., "Real Time Video and Audio in the World Wide Web", Dept. of Computer Science, Univ. of Illinois, Champagne - Urbana	Undated
13	Content Networking with the Helix Platform, RealNetworks White Paper Series, July 2002	
14	HESS, C., Media Streaming Protocol: An Adaptive Protocol for the Delivery of Audio and Video over the Internet", 1998, Univ. of Illinois, Champagne-Urbana	/ACF/
15	KOSTER, R., "Design of a Multimedia Player with Advanced QoS Control", January 1997, Oregon Graduate Institute of Science and Technology	01/27/2010
16	NARASIMHA, R. et al. "I/O Issues in a Multimedia System"; Computer, Vol. 27, No. 3, pg 69-74, March 1994, USA	
17	RAMAKRISHNAN, K.K. et al.; "Operating system Support for a video-on-demand file service"; Multimedia Systems; Vol. 3, No. 2, Pg. 53-65, 1995 West Germany	
18	NWOSU, K.C. et al. "Data Allocation and Spatio-Temporal Implications for Video-on-Demand Systems"; Proceedings of 1995 14th Annual Phoenix Conference on Computers and Communications; (Cat. No.95CH35751), pg. 629-35; IEEE: 1995 USA	
19	EUN, S.; et al. "Nonpreemptive scheduling algorithms for multimedia communication in local area networks"; Proceedings 1995 Int'l Conf on Network Protocols (Cat. no.: 95TB8122) pg. 356-IEEE Comput. Soc. Press; 1995 Los Alamitos, CA USA 1996	
20	NAKAJIMA, T.; "A Dynamic QoS control based on Optimistic processor reservation"; Proceedings of the Int'l conf. on Multimedia Computing and Systems (Cat. No.: 96TB100057), pg. 95-103, IEEE Comp. Soc. 1996, Los Alamitos, CA	
21	Orji, C.U. et al.; "Spatio-temporal effects of multimedia objects storage delivery on video-on-demand systems"; Multimedia Systems; vol. 5, no. 1, pg 39-52, Springer-Verlag; January 1997, Germany	
22	KENCHAMMANA-HOSEKOTE, D.R., et al.; "I/O scheduling for digital continuous media"; Multimedia Systems, vol. 5, no.4, pg 213-37, Springer-Verlag, July 1997 Germany	
23	MATSUY, Y et al.; "VoR: a network system framework for VBRT over reserved bandwidth"; Interactive Distributed Multimedia Systems and Telecommunications Services, 4th Int'l Workshop, IDMS '97 Proceedings; pg 189-98, Springer-Verlag; 1997, Berlin, Germany	
24	LULING, R. et al.; "Communication Scheduling in a Distributed memory parallel interactive continuous media server system"; Proceedings of 1998 ICPP Workshop on Architectural systems and OS Support for Multimedia Applications Flexible Communications Systems, Wireless Networks and Mobile Computing; (Cat. no. 98EX206) pg 56-65; IEEE Comput. Soc. 1998 Los Alamitos, CA USA	
25	SEONGBAE, E., et al; "A real-time scheduling algorithm for multimedia communication in samll dedicated multimedia systems"; KISS(A) (Computer Systems and Theory) vol 25, no.5, pg492-502; Korea Inf. Sci. Soc; May 1998, South Korea, 1999	
26	GAROFALAKIS, M.N., et al. "Resource scheduling in enhanced pay-per-view continuous media databases"; Proceedings of 23rd Int'l Conf. on Very Large Databases; pg 516-25; Morgan, Kaufman Publishers, 1997, San Francisco, CA USA 1999	
27	MOSTEFAOUI, A.; "Exploiting data structures in a high performance video server for TV archives"; Proceedings of the Int'l Symposium on Digital Media information Base, pg 516-25, World Scientific, 1998 Singapore	
28	GAROFALAKIS, M.N., "On periodic resource scheduling for continuous media databases: VLDB Journal, Vol 7, no.4, pg 206-25; 1998 Springer Verlag, germany 1999	
29	HWEE-HWA, P., et al, "Resource Scheduling In A High Performance Multimedia Server," March-April 1999, IEEE, USA.	
30	YOUNG-UHG, L. et al, "Performance analysis and evaluation of allocating subbanded video data block on MZR disk arrays"; Proceedings of the High Performance Computing (HPC'98) pg 335-40, Soc for Comp Simulation Int'l 1998, San Diego, CA, USA	
31	FENG, C. et al.; "An architecture of distributed media servers for supporting guaranteed QoS and media indexing"; IEEE Int'l Conf on Multimedia Computing and Systems, Part vol. 2 IEEE Comp. Soc. 2 vol. 1999 Los Alamitos, CA 1999	
32	TO, T.-P.J. et al "Dynamic optimization of readsize in hypermedia servers"; IEEE Int'l Conf on Multimedia Computing and Systems; Part vol. 2, pg 486-91, Pub. IEEE Comput. Soc. 2 vol. 1999 Los Alamitos, CA USA	
33	LEE, W. et al., "QoS-adaptive bandwidth scheduling in continuous media streaming"; Information and Software Technology; v.44n, June 2002, pg 551-563	

	34	WADDINGTON, D.G., "Resource partitioning in general purpose operating systems; experimental results in Windows NT"; Operating Systems Review, vol. 33, no4, pg52-74; ACM, October 1999, USA
	35	DITZE, M. et al. "A method for real-time scheduling and admission control of MPE 2 streams; PART 2000; 7th Australian Conference on Parallel and Real-Time Systems", Nov. 2000, Sydney, NSW, Australia, Pub: Springer-Verlag, Hong Kong, China 2001
	36	GAROFALAKIS, M., et al, "Competitive Online scheduling of continuous media streams", Journal of Computer and Systems Sciences; vol64, no2 pg 219-48, Academic Press, March 2002 USA
	37	WONJON, L. et al. ; "QoS-adaptive bandwidth scheduling in continuous media streaming" Dept of Computer Sci and Engr, Korea University, Seoul, South Korea; Information and Software Technology, vol 44, no9, pg551-53, Seoul, Korea
	38	MOURLAS, C.; "Deterministic scheduling of CBR and VBR media flows on parallel media servers", Euro-Par 2002 Parallel Processing 8th Intn'l Euro-Par Conference Proceedings; Vol 2400, pg 807-15, August 2002, Paderborn, Germany 2003
	39	BUFORD, J.F.; "Storage server requirements for delivery of hypermedia documents", Proceedings of the SPIE - The International Society for Optical Engineering Conference, Int. Soc. Opt. Eng. vol2417, pg 346-55, 1995

Undated

/ACF/

01/27/2010

Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

/Andrew Flanders/ 01/27/2010